```
=======    WPI     =======
TI      Washing machine for cleaning circuit board after soldering - uses nozzle
        on each washing stage to discharge water when circuit board feed to
        stage is detected  NoAbstract
AB   -  J05146766
     -  (Dwg.1/5)
PN   -  JP5146766 A 19930615 DW199328 B08B3/02 008pp
PR   -  JP19910316205 19911129
PA   -  (SHAF ) SHARP KK
MC   -  V04-R03C X24-A09 X25-H09
DC   -  P43 V04 X24 X25
IC   -  B08B3/02 ;H05K3/26
AN   -  1993-223692 [28]
=======    PAJ     =======
TI   -  CLEANER
AB   -  PURPOSE:To reduce the amt. of water to be used in the cleaner by
        controlling the water supplying time of a cleaning nozzle when the
        arrival of a material to be cleaned at the conveyor corresponding to
        each treating tank is detected.
     -  CONSTITUTION:A substrate 29 is conveyed by a net conveyor 1, when an
        operating switch is turned on, and a control relay X14 is energized. The
        substrate 29 is detected by a first photosensor 24 at the inlet to an
        ultrasonic cleaning tank 2, an inverter 30 is actuated, hence the first
        control relay X1 is energized, a contact X1A is closed, a ninth control
        relay X9 is energized, and an ultrasoninc vibrator 47 is operated. When
        the arrival of the substrate at a rough washing tank 3 is detected by a
        photosensor 25, an inverter 31 is actuated, a water feed solenoid valve
        12 is opened through the control relays X2 and X10, and water is
        sprinkled from a shower nozzle 9. The water is supplied for the time
        determined by the capacitor C1 and resistance R11. Washing tanks 4 and 5
        are also operated in the same way.
PN   -  JP5146766 A 19930615
PD   -  1993-06-15
ABD  -  19930927
ABV  -  017533
AP   -  JP19910316205 19911129
GR   -  C1114
PA   -  SHARP CORP
IN   -  SEGAWA HIROAKI
I    -  B08B3/02 ;H05K3/26
```
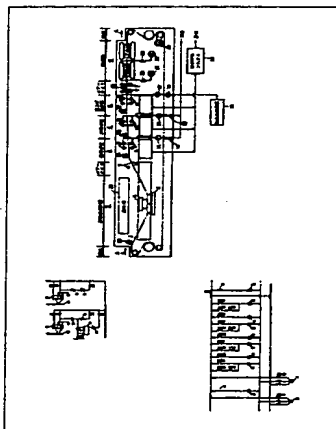

<First Page Image>